Practice: 645 - Upland Wildlife Habitat Management

Scenario: #1 - Macro Topography, deep

Scenario Description:

Establishment of a topographic feature on the landscape consisting of a small dam and pool or small excavated depression that will hold water to provide a source of water for wildlife, including habitat for reptiles and amphibians. Payment includes the equipment and labor associated with establishing the water feature.

Before Situation:

This practice will be installed on any area where seasonal or permenent water for wildlife is inadequate. The resource concerns to be addressed by this practice are inadequate water needed to meet the life needs of the target species or guild. Water storage during the critical period (season) is absent. No micro-ponding sites are available aquatic dependent invertebrates. Vertebrate wildlife habitat is lacking richness.

After Situation:

This practice consists of an excavated depression to collect water for wildlife to access. Excavated depressions are typically 1000 ft2 and 3 feet deep in center with 4:1 side slopes around edge. Associated practices: Critical Area Planting (342), Conservation Cover (327)

Scenario Feature Measure: Each deep macro-topography feature

Scenario Unit: Each

Scenario Typical Size: 1

Scenario Cost: $870.24 **Scenario Cost/Unit:** $870.24

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Dozer, 140 HP	927	Track mounted Dozer with horsepower range of 125 to 160. Equipment and power unit costs. Labor not included.	Hour	$125.87	4	$503.48
Labor						
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12”, Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	$26.97	4	$107.88
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	$258.88	1	$258.88

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Scenario: #3 - Habitat Monitoring and Management, Low Intensity and Complexity

Scenario Description:

This scenario is applied to all land use types including those with wildlife as a modifier, where any resource concern is identified for wildlife, and where low intensity and complexity of monitoring or management will treat the identified resource concern. Only 1-2 monitoring efforts are needed and each requiring less than 2 people and 4 hours per effort. The adaptive management actions such as cutting of limbs that are impeding access of birds into nest boxes, replacing damaged fence markers, cleaning of nest structures and debris around other structures requires only hand labor and less than 8 hours labor per year.

Before Situation:

Wildlife habitat is deficient due to the absence of annual monitoring and adaptive management actions of low intensity and complexity.

After Situation:

Wildlife habitat is improved by implementation of annual adaptive management actions of low intensity and complexity.

Scenario Feature Measure: Monitoring efforts and adaptive management actions

Scenario Unit: Acre

Scenario Typical Size: 160

Scenario Cost: $642.15 **Scenario Cost/Unit:** $4.01

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Rangeland/grassland field monitoring kit	967	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only.	Each	$45.96	1	$45.96
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	$37.64	1.5	$56.46
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	$6.37	1	$6.37
Labor						
Specialist Labor	235	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	$97.78	4	$391.12
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$20.32	7	$142.24

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Scenario: #4 - Habitat Monitoring and Management, Medium Intensity and Complexity

Scenario Description:

This scenario is applied to all land use types including those with wildlife as a modifier, where any resource concern is identified for wildlife, and where medium intensity and complexity of monitoring or management will treat the identified resource concern. Two or three monitoring efforts are needed and each requiring less than 2 people and less than 8 hours per effort. Two or three adaptive management efforts are required (such as cutting of limbs that are impeding access of birds into nest boxes, replacing damaged fence markers, cleaning of nest structures and debris around other structures). The adaptive mgmt requires hand labor and the occasional use of light equipment. A crew of 2 is needed for the hand labor efforts and the crew will require less than 16 total hours of labor per mgmt effort. Mowing of roads and trail is required to provide access for monitoring and management.

Before Situation:

Wildlife habitat is deficient due to the absence of annual monitoring and adaptive management actions of medium intensity and complexity.

After Situation:

Wildlife habitat is improved by implementation of annual adaptive management actions of medium intensity and complexity.

Scenario Feature Measure: Monitoring efforts and adaptive management actions

Scenario Unit: Acre

Scenario Typical Size: 160

Scenario Cost: $2,049.03 **Scenario Cost/Unit:** $12.81

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Mower, Bush Hog	940	Equipment and power unit costs. Labor not included.	Hour	$51.43	5	$257.15
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	$37.64	6	$225.84
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	$6.37	4	$25.48
Rangeland/grassland field monitoring kit	967	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only.	Each	$45.96	1	$45.96
Labor						
Specialist Labor	235	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	$97.78	10	$977.80
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$20.32	20	$406.40
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.08	5	$110.40

Practice: 645 - Upland Wildlife Habitat Management

Scenario: #5 - Habitat Monitoring and Management, High Intensity and Complexity

Scenario Description:

This scenario is applied to all land use types including those with wildlife as a modifier, where any resource concern is identified for wildlife, and where high intensity and complexity of monitoring or management will treat the identified resource concern. Two - four monitoring efforts are needed and each requiring less than 2 people and less than 8 hours per effort. The adaptive management actions (2 - 5 efforts) such as cutting of limbs that are impeding access of birds into nest boxes, replacing damaged fence markers, cleaning of nest structures and debris around other structures requires hand labor and light equipment, requiring a 2-person crew less than 1 day per effort.

Before Situation:

Wildlife habitat is deficient due to the absence of annual monitoring and adaptive management actions of high intensity and complexity.

After Situation:

Wildlife habitat is improved by implementation of annual adaptive management actions of high intensity and complexity.

Scenario Feature Measure: Monitoring efforts and adaptive management actions

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: $2,497.29 **Scenario Cost/Unit:** $31.22

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Equipment/Installation						
Hydraulic Excavator, 1 CY	931	Track mounted hydraulic excavator with bucket capacity range of 0.8 to 1.5 CY. Equipment and power unit costs. Labor not included.	Hour	$115.48	4	$461.92
Rangeland/grassland field monitoring kit	967	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only.	Each	$45.96	1	$45.96
Mower, Bush Hog	940	Equipment and power unit costs. Labor not included.	Hour	$51.43	3	$154.29
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	$37.64	6	$225.84
Chainsaw	937	Equipment and power unit costs. Labor not included.	Hour	$6.37	8	$50.96
Labor						
Specialist Labor	235	Labor requiring a specialized skill set: Includes Agronomists, Foresters, Biologists, etc. to provide additional technical information during the planning and implementation of the practice. Does not include NRCS or TSP services.	Hour	$97.78	10	$977.80
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	$26.97	4	$107.88
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	$22.08	3	$66.24
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	$20.32	20	$406.40

Practice: 645 - Upland Wildlife Habitat Management

Scenario: #6 - Wildlife Habitat Enh w/ FI

Scenario Description:

Exclusion of livestock on 40 acres of pastureland for the enhancement of habitat for wildlife. Monitoring to assure gates are closed and cattle remain excluded during critical nesting period.

Before Situation:

Wildlife habitat is grazed during the primary nesting and development of wildlife species.

After Situation:

Livestock are excluded for wildlife habitat enhancement for the desired wildlife species. Implementation includes the exclusion of livestock to allow for adequate deferment for sufficient regrowth and development of the habitat.

Scenario Feature Measure: Acres Excluded

Scenario Unit: Acre

Scenario Typical Size: 40

Scenario Cost: $690.64 **Scenario Cost/Unit:** $17.27

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Foregone Income						
FI, Grazing AUMs	2079	Grazing is the Primary Land Use	AUM	$15.43	40	$617.20
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	$36.72	2	$73.44

Practice: 645 - Upland Wildlife Habitat Management

Scenario: #7 - Deferred Acres

Scenario Description:

Setting is any land use with the potential to provide habitat for species of plants and animals identified as Rare and Declining and the habitat potential is not currently being captured. The identified habitat limiting factors can be restored, enhanced or created, with the application of this practice alone, or in combination with other supporting and facilitating practices. Monitoring will be used to determine if the conservation system meets or exceeds the minimum quality criteria for the targeted wildlife. Management will be implemented based on the findings of the habitat assessment and monitoring. Habitat management and monitoring needed to treat the resource concerns requires no training, no qualitative data assessment, no water quality monitoring and is low in complexity and intensity. Examples of prescribed monitoring include but are not limited to: photo points taken, use documentation by livestock, regeneration/breeding success, completing an annual management records log, documenting wildlife sightings, documenting location and species of invasive plants and condition of vegetative and structural treatments. The planner will specify locations and identify the methods to the customer who will implement the monitoring and management plan. Includes foregone income. Setting is cropland that will be managed to benefit rare and declining habitats through deferral or seeding to permanent vegetation.

Before Situation:

Existing degraded plant conditions and resulting inadequate habitat for fish and wildlife have resulted in low use of the area by target species. On dryland fields.

After Situation:

Based on the results of a State-approved upland wildlife habitat assessment process, the application of habitat management efforts and prescribed monitoring has been implemented. Crop production has been halted to allow for implementation, management, and monitoring of wildlife habitat, resulting in income foregone. With the application of this practice alone, or in combination with other supporting and facilitating practices, the inadequate habitat conditions have been addressed. Monitoring has maximized the benefits of the needed habitat treatment efforts.

Scenario Feature Measure: Acres Managed and Monitored

Scenario Unit: Acre

Scenario Typical Size: 5

Scenario Cost: $2,243.92 **Scenario Cost/Unit:** $448.78

Cost Details (by category):

Component Name	ID	Component Description	Unit	Price ($/unit)	Quantity	Cost
Foregone Income						
FI, Corn Dryland	1959	Dryland Corn is Primary Crop	Acre	$437.76	2.5	$1,094.40
FI, Soybeans Dryland	1961	Dryland Soybeans is Primary Crop	Acre	$430.43	2.5	$1,076.08
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	$36.72	2	$73.44